

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Original) A method for measuring mobile charge in a dielectric layer on a substrate, said method comprising:

applying at least one first polarity corona bias temperature stress cycle to said layer;
applying successive second polarity corona bias temperature stress cycles to said layer and measuring a corresponding voltage drop, said successive cycles being of substantially equal time; and
determining said mobile charge according to said voltage drops.

Claims 2-3. (Canceled)

4. (Original) A method for measuring mobile charge in a dielectric layer on a substrate, said method comprising:

applying at least one first polarity corona bias temperature stress cycle to said layer;
applying successive second polarity corona bias temperature stress cycles to said layer and measuring a corresponding voltage drop;

measuring an amount of charge necessary to bias said substrate from a midband condition to a pull-up condition before at least one said successive second polarity corona bias temperature stress cycle;
measuring an amount of charge necessary to bias said leakage monitoring site back to said midband condi-

tion after said at least one of said successive second polarity corona bias temperature stress cycles; and
determining said mobile charge according to said voltage drops and a difference between said charge measurements.

5. (Original) A method according to claim 4, wherein said midband conditions are determined by a surface photovoltage measurement.

6. (Original) A method for measuring mobile charge in a dielectric layer on a substrate, said method comprising:
applying at least one first polarity corona bias temperature stress cycle to said layer;
applying successive second polarity corona bias temperature stress cycles to said layer and measuring a corresponding voltage drop;
measuring a surface photovoltage before and after at least one of said successive second polarity corona bias temperature stress cycles; and
determining said mobile charge according to said voltage drops and said surface photovoltages.

7. (Original) A method for measuring mobile charge in a dielectric layer on a substrate, said method comprising:
applying at least one first polarity corona bias temperature stress cycle to said layer;
applying successive second polarity corona bias temperature stress cycles of substantially equal time to said layer and measuring a corresponding voltage drop until said voltage drops approach a terminal value;

creating a dipole potential monitoring site on said layer with a second polarity corona prior to at least one first polarity corona bias temperature stress cycle; measuring a dipole site voltage at said site before and after at least one second polarity corona bias temperature stress cycle; measuring an amount of charge necessary to bias said substrate from a midband condition to a pull-up condition before at least one said successive second polarity corona bias temperature stress cycle; measuring an amount of charge necessary to bias said leakage monitoring site back to said midband condition after said at least one of said successive second polarity corona bias temperature stress cycles; measuring a surface photovoltage before and after at least one of said successive second polarity corona bias temperature stress cycles; and determining said mobile charge according to said voltage drops, said dipole site voltages, a difference between said charge measurements and said surface photovoltages.